

and leg sheaths somewhat more pellucid in color, extending vertically to near or a little beyond middle of eighth segment. First three abdominal segments short, fourth to sixth about twice as long and nearly equal both in length and in width, the three remaining segments (11 to 13) shortened and narrowed. Anal segment terminated by eight recurved hooks, six being in a transverse row, and one dorsal of each end of the row, the median pair longer than the others.

Described from several specimens. Colors noted in life.

For brief description of the net-like silken cocoon, see Can. Ent. l. c. The cocoons are very beautifully made.

LOCAL ENTOMOLOGICAL NOTES.

Members of the New York Entomological Society and all others, are solicited to contribute to this column, their rare captures, local lists and other items of interest relating to the insect fauna of New York city and vicinity.

THE SEVENTEEN-YEAR CICADA ON STATEN ISLAND.

By WM. T. DAVIS.

The Seventeen-year Cicada occurred in vast numbers on Staten Island in 1877, and consequently will appear there again during the coming summer. This brood has been numbered XII by Prof. Riley, and Dr. Fitch wrote of it in 1855 as inhabiting the valley of the Hudson River.

It may not be uninteresting in view of these facts, to record the straggling specimens of the Periodical Cicada which have been observed on the Island since 1877, a more detailed account of which may be found in the Proceedings of the Natural Science Association of Staten Island.

In 1881, Brood XVIII, appeared on the Island in some numbers. Mr. Leng and I found a pupa under a stone, and on the 5th of June eight specimens were collected. By the 12th of the month they had become quite numerous, and I counted about one tree, fifty-two pupa skins. The brood to which these insects belonged

does not appear in great numbers in the east, but is mainly located in Wisconsin and neighboring states. Staten Island, Essex Co., N. J., and Germantown, Penn., were apparently the only eastern localities from which the insect was reported in 1881.

In 1885, Brood XXII was to make its appearance in the east, but the only evidence of the Cicada on the Island, was the finding of a single wing along a wood path in the Clove Valley. In Pennsylvania the insects occurred in great numbers, and more sparingly in New Jersey, and in the vicinity of Brooklyn on Long Island.

In 1888, I found a single male Cicada on the Island on the 16th of June. It was unable to fly as one of its fore wings was deformed, and consequently must have been borne in the immediate vicinity.

What follows for 1889 and 1890 probably applies to Brood VIII, which was expected to make its appearance in the first named year on Long Island and in parts of Pennsylvania and West Virginia. In Vol. I, No. 4, of the Proceedings of the Entomological Society of Washington, this Brood is recorded from North Carolina and West Virginia, and in less numbers from the District of Columbia, Maryland and New Jersey.

In the summer of 1889 Mr. Jos. C. Thompson gave me a pupa skin of a red-eyed Cicada, which he had found on a grass stem, and which was the only evidence I secured of the presence of the insect on the Island.

In 1890 the Cicadas were not expected to appear in any part of the country, but they were, however, more common in Staten Island than in 1889. In early summer three pupa skins and two imagos were found, and on September 8th, I dug a live pupa from a hill of potatoes.

In 1892 the Seventeen-year Cicada were heard singing in three different districts of the Island, and specimens were also secured.

In 1893 they were more numerous than in the previous year, and were heard singing in various parts of the Island. Mr. Leng's children gave me specimens collected in his garden at West New Brighton. It is not unlikely that the Cicadas of 1892 and 1893 were precursors of the general swarm that is to come early next summer.

